Abstract of the Invention

A modular system and method for programming machine automation controls is disclosed. The system includes a library of minor step modules and a procedure creator for creating a machine automation procedure from an assembly of the minor step modules. The system also includes a product type manager for inputting product parameters independent of the minor step modules, a system configuration manager for defining machine configuration independent of the minor step modules, and an execution engine for calling the procedure and maintaining information flow in and out of the minor step modules.